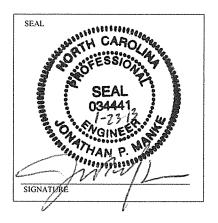
# FOUNDATION RECOMMENDATIONS

PROJECT	17BP.7.R.10	DESCRIPTION
T.I.P. NO	17BP.7.R.10	Bridge No. 300 on State Route 3355 (Layton Road)
COUNTY	Guilford	over the South Prong of Stinking Quarter Creek

	INITIALS	DATE
DESIGN	JPM	1/18/2013
CHECKED	DJC	1/18/2013
FINAL	JPM	1/23/2013

STATION ~12+61.50 -L-



	STATION	FOUNDATION TYPE	FACTORED RESISTANCE	MISCELLANEOUS DETAILS		
END BENT NO. 1	12+34.00 –L-	Cap on excavated HP 12 x 53 steel piles	75 tons/pile	Bottom of Cap Elevation = 602.5 feet +/- Estimated Average Pile Length = 10 feet Number of Piles/Cap = 7		
END BENT NO. 2	12+89.00 –L-	Cap on excavated HP 12 x 53 steel piles	75 tons/pile	Bottom of Cap Elevation = 603 feet +/- Estimated Average Pile Length = 10 feet Number of Piles/Cap = 7		

#### FOUNDATION RECOMMENDATION NOTE ON PLANS AND COMMENTS

W.B.S. No. <u>:</u>	17BP.7.R.10	BRIDGE NO:	400300	COUNTY: Guilford

STATION: <u>~12+61.50 -L-</u>

DESCRIPTION: Bridge #300 on SR 3355 (Layton Rd) over the South Prong of Stinking Quarter Creek

COMMENTS & NOTES (See Following Page)

### Note on Plans:

1. FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATION.

- 2. PILES AT END BENT NOS. 1 AND 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 75 TONS PER PILE.
- 3. PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT END BENT NO. 1. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION 592.5 FT. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- 4. PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT END BENT NO. 2. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION 593 FT. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- 5. CONCRETE IS REQUIRED TO FILL HOLES FOR PILE EXCAVATION AT END BENT NOS. 1 AND 2.

## **Comments:**

- 1. USE 1.5:1 (H:V) END BENT SLOPES WITH CLASS II RIP-RAP SLOPE PROTECTION.
- 2. THE AVERAGE FACTORED AXIAL LOAD AT END BENT NOS. 1 AND 2 IS 71 TONS PER PILE.
- 3. USE SUB-REGIONAL BRIDGE APPROACH FILLS AT BOTH END BENTS.

# PILE PAY ITEMS

(Revised 8/15/12)

WBS ELEMENT_	17BP.7.R.10	DATE 1/23/2013
TIP NO.	17BP.7.R.10	DESIGNED BY J. Manke
COUNTY	Guilford	CHECKED BY D. Corley
STATION_	~12+61.50 -L-	_
DESCRIPTION_	Bridge No. 300 on SR 3355 (Layton Road) Cre	
NUMI NUMBER OF	R OF BENTS WITH PILES BER OF PILES PER BENT END BENTS WITH PILES 2 OF PILES PER END BENT 7	Only required for "Predrilling for Piles" & "Pile Excavation" pay items

	PILE PAY ITEM QUANTITIES						
20.11	Steel Pile	Pipe Pile	Predrilling	Pile	Pile Excavation (per linear ft)		PDA
Bent # or	Points	Plates	For Piles	Redrives	In	Not In	Testing
End Bent #	(yes/no)	(yes/no/maybe)	(per linear ft)	(per each)	Soil	Soil	(per each)
					A0003M4000000000000000000000000000000000		\ /
End Bent 1	no	no	no	no	38	32	\
							\ /
End Bent 2	no	no	no	no	42	28	\ /
							/ \
							/ \
							/ \
							/
TOTALS			0	0	80	60	

#### Notes:

Blanks or "no" represent quantity of zero.

If steel pile points are required, calculate quantity of "Steel Pile Points" as equal to the number of steel piles.

If pipe pile plates are or may be required, calculate the quantity of "Pipe Pile Plates" as equal to the number of pipe piles.

Show quantity of "PDA Testing" on the plans as total only.

If quantity of "PDA Testing" is 3 or less, reference "Pile Driving Criteria" provision in PDA notes on plans and include "Pile Driving Criteria" provision in the contract.